IN THE CLAIMS

Please cancel claims 60 to 62 without prejudice or disclaimer of subject matter. Please amend Claims 58, 74 and 75 as shown below. The claims, as pending in the subject application, read as follows:

1. to 24. (Cancelled)

25. (Withdrawn) An information processing apparatus comprising:

means for executing a basic process for matching setup conditions with each other;

generation means for generating complementary process rules that complement the basic process so-as to match the setup conditions; and

control means for matching the setup conditions in accordance with the basis process and complementary process rules, and determining control parameters based on the conditions.

26. (Withdrawn) The apparatus according to claim 25, wherein said control means determines the presence/absence of a conflict between setup conditions, which are input from input means for inputting the setup conditions, and applies the basic process and the complementary process rules to determine control parameters if any conflict is detected.

27. (Withdrawn) The apparatus according to claim 25, further comprising:

interface means for visualizing the setup conditions; and

display control means for displaying the conditions determined by said control means on said interface means.

28. (Withdrawn) The apparatus according to claim 27, wherein said display control means informs that the setup conditions have been changed upon applying the basic process and the complementary process rules by said control means.

29. (Withdrawn) An image forming apparatus comprising:

an information processing apparatus cited in claim 25; and

image forming means for determining control parameters which are input to said information processing apparatus and are used to form an image, and forming image information on the basis of the determined control parameters.

30. (Withdrawn) The apparatus according to claim 29, wherein said image forming apparatus includes a printer and facsimile.

31. (Withdrawn) An information processing method comprising:

the step of executing a basic process for matching setup conditions with each other;

the generation step of generating complementary process rules that complement the basic process so as to match the setup conditions; and

the control step of matching the setup conditions in accordance with the basis process and complementary process rules, and determining control parameters based on the conditions.

32. (Withdrawn) The method according to claim 31, wherein the control step includes the step of determining the presence/absence of a conflict between setup conditions, which are input from the input step of inputting the setup conditions, and applying the basic process and the complementary process rules to determine control parameters if any conflict is detected.

33. (Withdrawn) The method according to claim 31, further comprising:

the interface step of visualizing the setup conditions; and

the display control step of displaying the conditions determined by the control step in the interface step.

34. (Withdrawn) The method according to claim 33, wherein the display control step includes the step of informing that the setup conditions have been changed upon applying the basic process and the complementary process rules by the control step.

35. (Withdrawn) A program for making a computer implement an information processing method, comprising:

a module for executing a basic process for matching setup conditions with each other;

a generation module for generating complementary process rules that complement the basic process so as to match the setup conditions; and

a control module for matching the setup conditions in accordance with the basis process and complementary process rules, and determining control parameters based on the conditions.

36. (Withdrawn) The program according to claim 35, wherein said control modules determines the presence/absence of a conflict between setup conditions, which are input from an input module for inputting the setup conditions, and applies the basic process and the complementary process rules to determine control parameters if any conflict is detected.

37. (Withdrawn) The program according to claim 35, further comprising:

an interface module for visualizing the setup conditions; and

a display control module for displaying the conditions determined by said control module in said interface module.

38. (Withdrawn) The program according to claim 37, wherein said display control module informs that the setup conditions have been changed upon applying the basic process and the complementary process rules by said control module.

39. (Withdrawn) A computer readable storage medium that stores a program module used to make a computer implement an information processing method, said program module comprising:

a module for executing a basic process for matching setup conditions with each other;

a generation module for generating complementary process rules that complement the basic process so as to match the setup conditions; and

a control module for matching the setup conditions in accordance with the basis process and complementary process rules, and determining control parameters based on the conditions.

40. (Withdrawn) A user interface control apparatus for avoiding a conflict that occurs due to setup information, which is input via a user interface that can input setup information for a predetermined object to be controlled, comprising:

storage means for storing conflict process rules indicating conflict avoidance strategies; and

update means for updating related setup information by applying the conflict process rules on the basis of the input setup information,

said update means comprising:

detection means for detecting setup information to be changed by applying the conflict process rules; and

setup information change means for changing only the detected setup information.

41. (Withdrawn) The apparatus according to claim 40, further comprising informing means for informing that the setup information has been changed by said setup information change means.

42. (Withdrawn) The apparatus according to claim 40, wherein the object to be controlled is an image forming apparatus.

43. (Withdrawn) A user interface control method for avoiding a conflict that occurs due to setup information, which is input via a user interface that can input setup information for a predetermined object to be controlled, comprising:

the detection step of referring to a conflict process rule description file that describes conflict process rules indicating conflict avoidance strategies, and detecting setup information to be changed by applying the conflict process rules; and

the setup information change step of changing only the detected setup information.

44. (Withdrawn) The method according to claim 43, further comprising the informing step of informing that the setup information has been changed in the setup information change step.

45. (Withdrawn) The method according to claim 43, wherein the conflict process rule description file can contain a description of a control command which restricts a change in predetermined setup information, and the detection step comprises the

step of restricting a change in corresponding setup information in accordance with a control command read out from the conflict process rule description file.

46. (Withdrawn) A program for making a computer implement a user interface control method for avoiding a conflict that occurs due to setup information, which is input via a user interface that can input setup information for a predetermined object to be controlled, comprising:

a program code of the detection step of referring to a conflict process rule description file that describes conflict process rules indicating conflict avoidance strategies, and detecting setup information to be changed by applying the conflict process rules; and

a program code of the setup information change step of changing only the detected setup information.

47. (Withdrawn) The program according to claim 46, further comprising a program code of the informing step of informing that the setup information has been changed in the setup information change step.

48. (Withdrawn) A storage medium that stores a program for making a computer implement a user interface control method for avoiding a conflict that occurs due to setup information, which is input via a user interface that can input setup information for a predetermined object to be controlled, storing:

a program code of the detection step of referring to a conflict process rule description file that describes conflict process rules indicating conflict avoidance strategies, and detecting setup information to be changed by applying the conflict process rules; and

a program code of the setup information change step of changing only the detected setup information.

49. to 57. (Cancelled)

58. (Currently Amended) A conflict process rule generation apparatus for generating conflict process rules that define conditions for avoiding a conflict between settings related to printing, comprising:

a memory configured to store a principal rule that corresponds to a part of the conflict process rules; and

an inference engine configured to generate a complementary rule that corresponds to the rest of the conflict process rules based on the principal rule stored in said memory, and to additionally write the complementary rule in said memory,

~~wherein when said memory stores the principal rule for one state of one of the settings related to printing having two states, and does not store any principal rule for the other state, said inference engine generates inverse logic of the principal rule for the one state as the complementary rule for the other state~~

wherein said memory stores the conflict process rules as a conflict process rule description file.

and wherein the conflict process rule description file is described in accordance with a predetermined markup language,

and wherein the conflict process rule description file describes a local rule which can be applied to a specific printing device, and a universal rule description file that describes a universal rule which can be commonly applied to a plurality of printing devices is externally referred to.

59 to 62. (Cancelled)

63. (Previously Presented) A print control apparatus for controlling a printing device, comprising:

a memory configured to store a plurality of conflict process rules generated by the conflict process rule generation apparatus according to claim 58;

a user interface for selection of print options; and

a conflict manager configured to resolve a conflict between the print options input via said user interface by applying the plurality of conflict process rules stored in said memory.

64. (Previously Presented) The apparatus according to claim 63, wherein the plurality of conflict process rules include a description of an update command of said user interface.

65. (Previously Presented) The apparatus according to claim 63, further comprising a user interface controller configured to control said user interface to change a display status of a display item of the setting state of the print option updated by said conflict manager.

66. (Previously Presented) The apparatus according to claim 65, wherein the change of the display status of the display item includes grayout or display/non-display of the display item.

67. (Previously Presented) The apparatus according to claim 63, wherein the conflict process rule defines a condition for avoiding a conflict between at least two print options among Collate printing, Group printing, Staple finishing and Booklet printing.

68. (Previously Presented) A method for setting print options using a print control apparatus having a memory configured to store a plurality of conflict process rules generated by the conflict process rule generation apparatus according to claim 58, comprising the steps of:

displaying a user interface for selection of the print options; and

resolving a conflict between the print options input via the user interface by applying the plurality of conflict process rules stored in the memory.

69. (Previously Presented) The method according to claim 68, further comprising the step of controlling the user interface to change a display status of a display item of the setting state of the print option updated in said resolving step.

70. (Previously Presented) The method according to claim 69, wherein the change of the display status of the display item includes grayout or display/non-display of the display item.

71. (Previously Presented) The method according to claim 68, wherein the conflict process rule defines a condition for avoiding a conflict between at least two print options among Collate printing, Group printing, Staple finishing and Booklet printing.

72. (Previously Presented) A printer driver program stored on a computer-readable storage medium, the program for setting print options stored on a print control apparatus having a memory configured to store a plurality of conflict process rules generated by the conflict process rule generation apparatus according to claim 58, the program comprising:

code so as to display a user interface for selection of the print options; and

code so as to resolve a conflict between the print options input via the user interface by applying the plurality of conflict process rules stored in the memory.

73. (Previously Presented) A storage medium that stores a printer driver program for setting print options for a print control apparatus having a memory configured to store a plurality of conflict process rules generated by the conflict process rule generation apparatus according to claim 58, the program comprising:

code so as to display a user interface for selection of the print options; and

code so as to resolve a conflict between the print options input via the user interface by applying the plurality of conflict process rules stored in the memory.

74. (Currently Amended) A conflict process rule generation method for generating conflict process rules that define conditions for avoiding a conflict between settings related to printing, the method comprising the steps of:

storing a principal rule, which corresponds to a part of the conflict process rules, in a memory;

generating a complementary rule that corresponds to the rest of the conflict process rules based on the principal rule stored in the memory, using an inference engine; and

writing the complementary rule in the memory, using the inference engine,

~~wherein when the memory stores the principal rule for one state of one of the settings related to printing having two states, and does not store any principal rule for the other state, the inference engine generates inverse logic of the principal rule for the one state as the complementary rule for the other state~~

wherein said memory stores the conflict process rules as a conflict process rule description file.

and wherein the conflict process rule description file is described in accordance with a predetermined markup language,

and wherein the conflict process rule description file describes a local rule which can be applied to a specific printing device, and a universal rule description file that describes a universal rule which can be commonly applied to a plurality of printing devices is externally referred to.

75. (Currently Amended) A computer-readable storage medium storing a computer-executable program, the program for generating conflict process rules that define conditions for avoiding a conflict between settings related to printing, the program comprising code for:

storing a principal rule, which corresponds to a part of the conflict process rules, in a memory;

generating a complementary rule that corresponds to the rest of the conflict process rules based on the principal rule stored in the memory, using an inference engine; and

writing the complementary rule in the memory, using the inference engine,

~~wherein when the memory stores the principal rule for one state of one of the settings related to printing having two states, and does not store any principal rule for the other state, the inference engine generates inverse logic of the principal rule for the one state as the complementary rule for the other state~~

wherein said memory stores the conflict process rules as a conflict process rule description file,

and wherein the conflict process rule description file is described in accordance with a predetermined markup language,

and wherein the conflict process rule description file describes a local rule which can be applied to a specific printing device, and a universal rule description file that describes a universal rule which can be commonly applied to a plurality of printing devices is externally referred to.